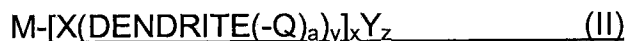
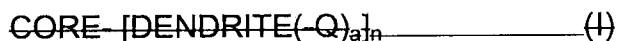


Amendments To The Claims

1. (Currently Amended) A charge-neutral organometallic dendrimer of formula ~~[[I):]]~~ (II):



~~in which CORE represents a group of formula MX_xY_z , in which M represents a metal cation, x represents an integer of ~~[[1]]~~ 2 or more, y represents an integer of 2 or more, each X which may be the same or different represents a mono-, bi- or tri-dentate coordinating group, z represents 0 or an integer of 1 or more, and each Y which may be the same or different represents a coordinating group, the total of (b.x) + (c.z) being equal to the number of coordination sites on M, wherein b is the number of coordination sites on X and c is the number of coordination sites on Y; n represents an integer of 2 or more; each DENDRITE which may be the same or different represents a dendritic molecular structure bonded to a group X, wherein each X terminates in the first single bond which is connected to a branching group or branching atom of DENDRITE; a represents 0 or an integer of 1 or more; and each Q which may be the same or different represents a surface group; CORE terminating in the first single bond which is connected to a branching group or branching atom of DENDRITE; which dendrimer has a structure in which no hemisphere of a notional sphere centred on M and containing the dendrimer is devoid of a said first single bond.~~

2. (Cancelled)

3. (Original) An organometallic dendrimer according to claim 2 wherein x is 3 and z is 0.

4. (Previously Presented) An organometallic dendrimer according to claim 1 that contains one inherently at least partially conjugated dendron.

5. (Previously Presented) An organometallic dendrimer according to claim 1 that contains two inherently at least partially conjugated dendrons.

6. (Previously Presented) An organometallic dendrimer according to claim 1 that contains at least three inherently at least partially conjugated dendrons.

7. (Previously Presented) An organometallic dendrimer according to claim 1 that contains all at least inherently partially conjugated dendrons.

8. (Previously Presented) An organometallic dendrimer according to claim 1 that is luminescent in the solid state.

9. (Cancelled)

10. (Cancelled)

11. (Previously Presented) An organometallic dendrimer according to claim 8 which is phosphorescent in the solid state and that emits from a metal to ligand charge transfer state.

12. (Currently Amended) An organometallic dendrimer according to claim 1 wherein each DENDRITE represents an inherently at least partially conjugated dendritic molecular structure comprising aryl and/or heteroaryl groups or nitrogen and, optionally, vinyl or acetylenyl groups connected via sp^2 or sp hybridised carbon atoms of said (hetero) aryl, vinyl and acetylenyl groups or via single bonds between N and (hetero) aryl groups, ~~CORE~~ each coordinating group X terminating in the first single bond which is connected to an sp^2 hybridised (ring) carbon atom of the first (hetero) aryl group or nitrogen to which more than one at least partially conjugated dendritic branch is attached, said ring carbon atom or N forming part of said DENDRITE.

13. (Currently Amended) An organometallic dendrimer according to claim 1 wherein at least one DENDRITE represents a dendritic molecular structure comprising at least one nitrogen atom which forms part of an aromatic ring system or is directly bonded to at least two aromatic groups, ~~CORE~~ each coordinating group X terminating in the single bond to the first nitrogen atom or aromatic ring to which more than one dendritic chain is attached, said nitrogen atom or ring forming part of said DENDRITE.

14. (Previously Presented) An organometallic dendrimer according to claim 1 wherein at least one Q is a surface group selected from a further-reactable alkene, (meth)acrylate, sulphur-containing, or silicon-containing group; a sulphonyl group; a polyether group; C₁-to-C₁₅ alkyl group; an amine group; a mono-, di- or tri-C₁-to-C₁₅ alkyl amine group; a -COOR group wherein R is hydrogen or C₁-to-C₁₅ alkyl ; an -OR group wherein R is hydrogen, aryl, or C₁-to-C₁₅ alkyl or alkenyl ; an -O₂SR group wherein R is C₁-to-C₁₅ alkyl or alkenyl; an-SR group wherein R is aryl, or C₁-to-C₁₅ alkyl or alkenyl; and an -SiR₃ group wherein the R groups are the same or different and are hydrogen, C₁-to-C₁₅ alkyl or alkenyl, or -SR' group (R' is aryl or C₁-to-C₁₅ alkyl or alkenyl), aryl, or heteroaryl.

15. (Cancelled)

16. (Cancelled)

17. (Previously Presented) An organometallic dendrimer according to claim 1 wherein the metal cation is iridium.

18. (Previously Presented) An organometallic dendrimer according to claim 1 wherein the metal cation is rhenium.

19. (Previously Presented) An organometallic dendrimer according to claim 1 wherein the metal cation is platinum.

20. (Previously Presented) An organometallic dendrimer according to claim 1 wherein at least one DENDRITE is attached to a coordinating group X that is bonded to M via at least one metal-carbon bond.

21. (Previously Presented) A film consisting essentially of an organometallic dendrimer according to claim 1.

22. (Previously Presented) A film comprising an organometallic dendrimer according to claim 1 and one or more molecular, dendritic or polymeric compounds.

23. (Original) A film according to claim 22 wherein the molar ratio of the organometallic dendrimer to the other component or components is from 1:1 to 100:1.

24. (Previously Presented) An organic light-emitting device comprising, in sequence, layers of an optional substrate, an electrode, a first optional charge-transporting layer, a light-emissive layer, a second optional charge-transporting layer and a counter electrode, wherein at least one of the light-emissive layer, first optional charge-transporting layer and second optional charge-transporting layers is a film comprising an organometallic dendrimer according to claim 1 or a film according to claim 21.

25. (Currently Amended) ~~A device according to claim 24~~ An organic light-emitting device comprising, in sequence, layers of an optional substrate, an electrode, a first optional charge-transporting layer, a light-emissive layer, a second optional charge-transporting layer and a counter electrode, wherein the light-emissive layer is a film comprising an organometallic dendrimer according to claim 1 or a film according to claim 21.

26. (Cancelled)

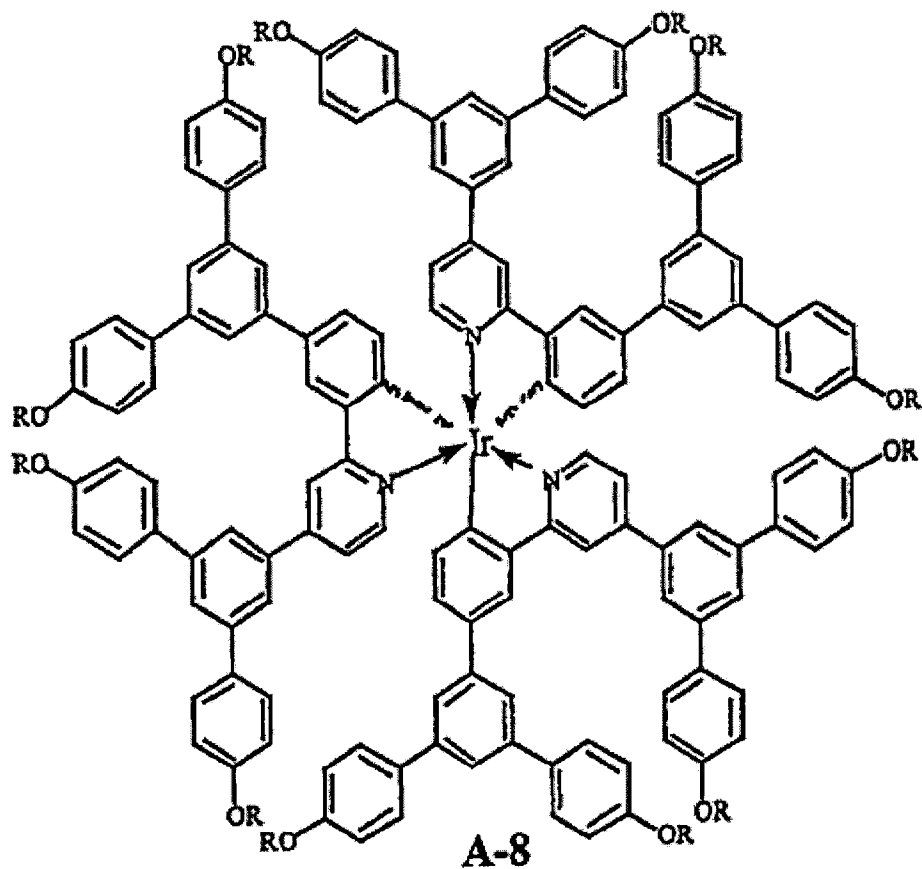
27. (Previously Presented) A device according to claim 24 wherein the light-emissive layer comprises an emissive dopant, as additional component.

28. (Previously Presented) A device according to claim 24 wherein the light-emissive layer comprises one or more charge-transporting species, as additional component.

29. (Previously Presented) A device according to claim 24 wherein the light-emissive layer comprises a molecular or dendritic species, as additional component.

30. (Previously Presented) A device according to claim 24 wherein the light-emissive layer comprises a polymer, as additional component.

31. (Cancelled)
32. (Cancelled)
33. (Cancelled)
34. (Cancelled)
35. (Cancelled)
36. (Cancelled)
37. (Cancelled)
38. (New) A charge-neutral organometallic dendrimer of formula (A-8):



wherein R is hydrogen, aryl, or C₁-to-C₁₅ alkyl or alkenyl.

39. (New) The organometallic dendrimer of claim 38 wherein R is 2-ethylhexyl.
40. (New) A film consisting essentially of an organometallic dendrimer according to claim 38.
41. (New) A film comprising an organometallic dendrimer according to claim 38 and one or more molecular, dendritic or polymeric compounds.
42. (New) A film according to claim 41 wherein the molar ratio of the organometallic dendrimer to the other component or components is from 1:1 to 100:1.
43. (New) An organic light-emitting device comprising, in sequence, layers of an optional substrate, an electrode, a first optional charge-transporting layer, a light-emissive layer, a second optional charge-transporting layer and a counter electrode, wherein at least one of the light-emissive layer, first optional charge-transporting layer and second optional charge-transporting layers is a film comprising an organometallic dendrimer according to claim 38 or a film according to claim 41.

44. (New) An organic light-emitting device comprising, in sequence, layers of an optional substrate, an electrode, a first optional charge-transporting layer, a light-emissive layer, a second optional charge-transporting layer and a counter electrode, wherein the light-emissive layer is a film comprising an organometallic dendrimer according to claim 38 or a film according to claim 41.

45. (New) A device according to claim 43 wherein the light-emissive layer comprises an emissive dopant, as additional component.

46. (New) A device according to claim 43 wherein the light-emissive layer comprises one or more charge-transporting species, as additional component.

47. (New) A device according to claim 43 wherein the light-emissive layer comprises a molecular or dendritic species, as additional component.

48. (New) A device according to claim 43 wherein the light-emissive layer comprises a polymer, as additional component.